

SEQUENCE LISTING

<110> Philip E. Thorpe  
Rolf A. Brekken

<120> ANTIBODY CONJUGATE METHODS FOR SELECTIVELY INHIBITING VEGF

<130> 4001.002585

<140> UNKNOWN

<141> 2000-04-28

<150> 60/131,432

<151> 1999-04-28

<160> 44

<170> PatentIn Ver. 2.0

<210> 1

<211> 2149

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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Tyr Asn Arg Ile Gln His Gly Gln Cys Ala Tyr Thr Phe Ile Leu Pro  
35 40 45

Glu His Asp Gly Asn Cys Arg Glu Ser Thr Thr Asp Gln Tyr Asn Thr  
50 55 60

Asn Ala Leu Gln Arg Asp Ala Pro His Val Glu Pro Asp Phe Ser Ser  
65 70 75 80

Gln Lys Leu Gln His Leu Glu His Val Met Glu Asn Tyr Thr Gln Trp  
85 90 95

Leu Gln Lys Leu Glu Asn Tyr Ile Val Glu Asn Met Lys Ser Glu Met  
100 105 110

Ala Gln Ile Gln Gln Asn Ala Val Gln Asn His Thr Ala Thr Met Leu  
115 120 125

Glu Ile Gly Thr Ser Leu Leu Ser Gln Thr Ala Glu Gln Thr Arg Lys  
130 135 140

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Ile Gln Leu Leu Glu Asn Ser Leu Ser Thr Tyr Lys Leu Glu Lys Gln  
165 170 175

Leu Leu Gln Gln Thr Asn Glu Ile Leu Lys Ile His Glu Lys Asn Ser  
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195 200 205

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210 215 220

Arg Gln Thr Tyr Ile Ile Gln Glu Leu Glu Lys Gln Leu Asn Arg Ala  
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Ser	Leu	Ile	Leu	His	Gly	Ala	Asp	Phe	Ser	Thr	Lys	Asp	Ala	Asp	Asn
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<213> Homo sapiens

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<400> 4

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20

25

30

Gln Tyr Gln Val Gln His Gly Ser Cys Ser Tyr Thr Phe Leu Leu Pro

35

40

45

Glu Met Asp Asn Cys Arg Ser Ser Ser Pro Tyr Val Ser Asn Ala

50

55

60

Val Gln Arg Asp Ala Pro Leu Glu Tyr Asp Asp Ser Val Gln Arg Leu  
 65                    70                    75                    80

Gln Val Leu Glu Asn Ile Met Glu Asn Asn Thr Gln Trp Leu Met Lys  
 85                    90                    95

Leu Glu Asn Tyr Ile Gln Asp Asn Met Lys Lys Glu Met Val Glu Ile  
 100                  105                  110

Gln Gln Asn Ala Val Gln Asn Gln Thr Ala Val Met Ile Glu Ile Gly  
 115                  120                  125

Thr Asn Leu Leu Asn Gln Thr Ala Glu Gln Thr Arg Lys Leu Thr Asp  
 130                  135                  140

Val Glu Ala Gln Val Leu Asn Gln Thr Thr Arg Leu Glu Leu Gln Leu  
 145                  150                  155                  160

Leu Glu His Ser Leu Ser Thr Asn Lys Leu Glu Lys Gln Ile Leu Asp  
 165                  170                  175

Gln Thr Ser Glu Ile Asn Lys Leu Gln Asp Lys Asn Ser Phe Leu Glu  
 180                  185                  190

Lys Lys Val Leu Ala Met Glu Asp Lys His Ile Ile Gln Leu Gln Ser  
 195                  200                  205

Ile Lys Glu Glu Lys Asp Gln Leu Gln Val Leu Val Ser Lys Gln Asn  
 210                  215                  220

Ser Ile Ile Glu Glu Leu Glu Lys Ile Val Thr Ala Thr Val Asn  
 225                  230                  235                  240

Asn Ser Val Leu Gln Lys Gln His Asp Leu Met Glu Thr Val Asn  
 245                  250                  255

Asn Leu Leu Thr Met Met Ser Thr Ser Asn Ser Ala Lys Asp Pro Thr  
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Val Ala Lys Glu Glu Gln Ile Ser Phe Arg Asp Cys Ala Glu Val Phe  
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Lys Ser Gly His Thr Thr Asn Gly Ile Tyr Thr Leu Thr Phe Pro Asn  
 290                  295                  300

Ser Thr Glu Glu Ile Lys Ala Tyr Cys Asp Met Glu Ala Gly Gly  
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Gly Trp Thr Ile Ile Gln Arg Arg Glu Asp Gly Ser Val Asp Phe Gln  
 325                  330                  335

Arg Thr Trp Lys Glu Tyr Lys Val Gly Phe Gly Asn Pro Ser Gly Glu  
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Tyr Trp Leu Gly Asn Glu Phe Val Ser Gln Leu Thr Asn Gln Gln Arg

355

360

365

Tyr Val Leu Lys Ile His Leu Lys Asp Trp Glu Gly Asn Glu Ala Tyr  
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Ser Leu Tyr Glu His Phe Tyr Leu Ser Ser Glu Glu Leu Asn Tyr Arg  
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Ile His Leu Lys Gly Leu Thr Gly Thr Ala Gly Lys Ile Ser Ser Ile  
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Ser Gln Pro Gly Asn Asp Phe Ser Thr Lys Asp Gly Asp Asn Asp Lys  
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Cys Ile Cys Lys Cys Ser Gln Met Leu Thr Gly Gly Trp Trp Phe Asp  
 435                   440                   445

Ala Cys Gly Pro Ser Asn Leu Asn Gly Met Tyr Tyr Pro Gln Arg Gln  
 450                   455                   460

Asn Thr Asn Lys Phe Asn Gly Ile Lys Trp Tyr Tyr Trp Lys Gly Ser  
 465                   470                   475                   480

Gly Tyr Ser Leu Lys Ala Thr Thr Met Met Ile Arg Pro Ala Asp Phe  
 485                   490                   495

&lt;210&gt; 5

&lt;211&gt; 495

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5

Met Trp Gln Ile Val Phe Phe Thr Leu Ser Cys Asp Leu Val Leu Ala  
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Ala Ala Tyr Asn Asn Phe Arg Lys Ser Met Asp Ser Ile Gly Lys Lys  
 20                   25                   30

Gln Tyr Gln Val Gln His Gly Ser Cys Ser Tyr Thr Phe Leu Leu Pro  
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Glu Met Asp Asn Cys Arg Ser Ser Ser Pro Tyr Val Ser Asn Ala  
 50                   55                   60

Val Gln Arg Asp Ala Pro Leu Glu Tyr Asp Phe Ser Ser Gln Lys Leu  
 65                   70                   75                   80

Gln His Leu Glu His Val Met Glu Asn Tyr Thr Gln Trp Leu Gln Lys  
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Leu Glu Asn Tyr Ile Val Glu Asn Met Lys Ser Glu Met Ala Gln Ile  
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Gln Gln Asn Ala Val Gln Asn His Thr Ala Thr Met Leu Glu Ile Gly  
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Thr Ser Leu Leu Ser Gln Thr Ala Glu Gln Thr Arg Lys Leu Thr Asp  
 130 135 140

Val Glu Thr Gln Val Leu Asn Gln Thr Ser Arg Leu Glu Ile Gln Leu  
 145 150 155 160

Leu Glu Asn Ser Leu Ser Thr Tyr Lys Leu Glu Lys Gln Leu Leu Gln  
 165 170 175

Gln Thr Asn Glu Ile Leu Lys Ile His Glu Lys Asn Ser Leu Leu Glu  
 180 185 190

His Lys Ile Leu Glu Met Glu Gly Lys His Lys Glu Glu Leu Asp Thr  
 195 200 205

Leu Lys Glu Glu Lys Glu Asn Leu Gln Gly Leu Val Thr Arg Gln Thr  
 210 215 220

Tyr Ile Ile Gln Glu Leu Glu Lys Gln Leu Asn Arg Ala Thr Thr Asn  
 225 230 235 240

Asn Ser Val Leu Gln Lys Gln Leu Glu Leu Met Asp Thr Val His  
 245 250 255

Asn Leu Val Asn Leu Ser Thr Lys Glu Gly Val Leu Leu Lys Gly Gly  
 260 265 270

Lys Arg Glu Glu Lys Pro Phe Arg Asp Cys Ala Asp Val Tyr Gln  
 275 280 285

Ala Gly Phe Asn Lys Ser Gly Ile Tyr Thr Ile Tyr Ile Asn Asn Met  
 290 295 300

Pro Glu Pro Lys Lys Val Phe Cys Asn Met Asp Val Asn Gly Gly  
 305 310 315 320

Trp Thr Val Ile Gln His Arg Glu Asp Gly Ser Leu Asp Phe Gln Arg  
 325 330 335

Gly Trp Lys Glu Tyr Lys Met Gly Phe Gly Asn Pro Ser Gly Glu Tyr  
 340 345 350

Trp Leu Gly Asn Glu Phe Ile Phe Ala Ile Thr Ser Gln Arg Gln Tyr  
 355 360 365

Met Leu Arg Ile Glu Leu Met Asp Trp Glu Gly Asn Arg Ala Tyr Ser  
 370 375 380

Gln Tyr Asp Arg Phe His Ile Gly Asn Glu Lys Gln Asn Tyr Arg Leu  
 385 390 395 400

Tyr Leu Lys Gly His Thr Gly Thr Ala Gly Lys Gln Ser Ser Leu Ile  
 405 410 415

Leu His Gly Ala Asp Phe Ser Thr Lys Asp Ala Asp Asn Asn Cys  
 420 425 430

Met Cys Lys Cys Ala Leu Met Leu Thr Gly Gly Trp Trp Phe Asp Ala  
435 440 445

Cys Gly Pro Ser Asn Leu Asn Gly Met Phe Tyr Thr Ala Gly Gln Asn  
450 455 460

His Gly Lys Leu Asn Gly Ile Lys Trp His Tyr Phe Lys Gly Pro Ser  
465 470 475 480

Tyr Ser Leu Arg Ser Thr Thr Met Met Ile Arg Pro Leu Asp Phe  
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<210> 6

<211> 381

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SYNTHETIC  
OLIGONUCLEOTIDE

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cagaaacctg ggcaggcct tgagtggatt ggatatatta atccttacaa tgatgttact 180  
aagtacaatg agaagttcaa aggcaaggcc acactgactt cagacaaaatc ctccagcaca 240  
gcctacatgg agctcagcag cctgaccctt gaggactctg cggtctattt ctgtgcaagc 300  
tactacggta gtatgtacgg atactatgtt atggacgact ggggccaagg gaccacggtc 360  
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<210> 7

<211> 127

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

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Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr  
20 25 30

Ser Tyr Val Phe His Trp Val Lys Gln Lys Pro Gly Gln Gly Leu Glu  
35 40 45

Trp Ile Gly Tyr Ile Asn Pro Tyr Asn Asp Val Thr Lys Tyr Asn Glu  
50 55 60

Lys Phe Lys Gly Lys Ala Thr Leu Thr Ser Asp Lys Ser Ser Ser Thr  
65 70 75 80

Ala Tyr Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr  
85 90 95

Tyr Cys Ala Ser Tyr Tyr Gly Ser Ser Tyr Gly Tyr Tyr Ala Met Asp  
100 105 110

Asp Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly  
115 120 125

<210> 8

<211> 347

<212> DNA

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OLIGONUCLEOTIDE

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gaatctgggg tccctgatcg cttcacagggc agtggatctg gaaccgattt cactcttacc 240  
atcagcagtg tgcaggctga agacctggca gtttattact gtcagaatga ttatagttat 300  
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<210> 9

<211> 115

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

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Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Asn Ser  
20 25 30

Gly Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45

Pro Pro Lys Leu Leu Ile His Gly Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80

Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Asn  
85 90 95

Asp Tyr Ser Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu

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105

110

Lys Arg Leu  
115

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PEPTIDE

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<210> 11  
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<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

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1 5 10 15

Met Asp Val Tyr Lys Arg Ser Tyr Cys  
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OLIGONUCLEOTIDE

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1 5 10 15

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Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly	
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Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly	
35 40 45	
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Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu	
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Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn	
65 70 75 80	
ctg aag gac gag gtg cta tct ccc agc tgg gac tcc ctg ttt tct ggc	288
Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly	
85 90 95	
tcc cag ggt caa ctg caa ccc ggg gcc cgc atc ttt tct ttt gac ggc	336
Ser Gln Gly Gln Leu Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly	
100 105 110	
aga gat gtc ctg aga cac cca gcc tgg ccg cag aag agc gta tgg cac	384
Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His	
115 120 125	
ggc tcg gac ccc agt ggg cgg agg ctg atg gag agt tac tgt gag aca	432
Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr	
130 135 140	
tgg cga act gaa act act ggg gct aca ggt cag gcc tcc tcc ctg ctg	480
Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu	
145 150 155 160	
tca ggc agg ctc ctg gaa cag aaa gct gcg agc tgc cac aac agc tac	528
Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr	
165 170 175	
atc gtc ctg tgc att gag aat agc ttc atg acc tct ttc tcc aaa	573
Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys	
180 185 190	

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 <211> 191  
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 <223> Description of Artificial Sequence: SYNTHETIC  
 PEPTIDE

<400> 13  
 Met His His His His His His Thr His Gln Asp Phe Gln Pro Val  
 1 5 10 15

Leu	His	Leu	Val	Ala	Leu	Asn	Thr	Pro	Leu	Ser	Gly	Gly	Met	Arg	Gly
20													30		
Ile	Arg	Gly	Ala	Asp	Phe	Gln	Cys	Phe	Gln	Gln	Ala	Arg	Ala	Val	Gly
35												45			
Leu	Ser	Gly	Thr	Phe	Arg	Ala	Phe	Leu	Ser	Ser	Arg	Leu	Gln	Asp	Leu
50											60				
Tyr	Ser	Ile	Val	Arg	Arg	Ala	Asp	Arg	Gly	Ser	Val	Pro	Ile	Val	Asn
65											75		80		
Leu	Lys	Asp	Glu	Val	Leu	Ser	Pro	Ser	Trp	Asp	Ser	Leu	Phe	Ser	Gly
											90		95		
Ser	Gln	Gly	Gln	Leu	Gln	Pro	Gly	Ala	Arg	Ile	Phe	Ser	Phe	Asp	Gly
										105		110			
Arg	Asp	Val	Leu	Arg	His	Pro	Ala	Trp	Pro	Gln	Lys	Ser	Val	Trp	His
115											125				
Gly	Ser	Asp	Pro	Ser	Gly	Arg	Arg	Leu	Met	Glu	Ser	Tyr	Cys	Glu	Thr
130										135		140			
Trp	Arg	Thr	Glu	Thr	Thr	Gly	Ala	Thr	Gly	Gln	Ala	Ser	Ser	Leu	Leu
145										155		160			
Ser	Gly	Arg	Leu	Leu	Glu	Gln	Lys	Ala	Ala	Ser	Cys	His	Asn	Ser	Tyr
										165		170		175	
Ile	Val	Leu	Cys	Ile	Glu	Asn	Ser	Phe	Met	Thr	Ser	Phe	Ser	Lys	
										180		185		190	

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<211> 182  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 14  
His Ser His Arg Asp Phe Gln Pro Val Leu His Leu Val Ala Leu Asn  
1 5 10 15

Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln  
20 25 30

Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala  
35 40 45

Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala  
50 55 60

Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe  
65 70 75 80

Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro  
85 90 95

Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro  
100 105 110

Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg  
115 120 125

Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser  
130 135 140

Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln  
145 150 155 160

Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn  
165 170 175

Ser Phe Met Thr Ala Ser  
180

<210> 15

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 15

Pro Arg Phe Lys Ile Ile Gly Gly  
1 5

<210> 16

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 16

Pro Arg Phe Arg Ile Ile Gly Gly  
1 5

<210> 17

<211> 9

<212> PRT

<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 17  
Ser Ser Arg His Arg Arg Ala Leu Asp  
1 5

<210> 18  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 18  
Arg Lys Ser Ser Ile Ile Ile Arg Met Arg Asp Val Val Leu  
1 5 10

<210> 19  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
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PEPTIDE

<400> 19  
Ser Ser Ser Phe Asp Lys Gly Lys Tyr Lys Lys Gly Asp Asp Ala  
1 5 10 15

<210> 20  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 20  
Ser Ser Ser Phe Asp Lys Gly Lys Tyr Lys Arg Gly Asp Asp Ala  
1 5 10 15

<210> 21  
<211> 4  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 21  
Ile Glu Gly Arg  
1

<210> 22  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 22  
Ile Asp Gly Arg  
1

<210> 23  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 23  
Gly Gly Ser Ile Asp Gly Arg  
1 5

<210> 24  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
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PEPTIDE

<400> 24  
Pro Leu Gly Leu Trp Ala  
1 5

<210> 25  
<211> 8  
<212> PRT  
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<220>

<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 25  
Gly Pro Gln Gly Ile Ala Gly Gln  
1 5

<210> 26  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 26  
Gly Pro Gln Gly Leu Leu Gly Ala  
1 5

<210> 27  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
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PEPTIDE

<400> 27  
Gly Ile Ala Gly Gln  
1 5

<210> 28  
<211> 8  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 28  
Gly Pro Leu Gly Ile Ala Gly Ile  
1 5

<210> 29  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 29  
Gly Pro Glu Gly Leu Arg Val Gly  
1 5

<210> 30  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 30  
Tyr Gly Ala Gly Leu Gly Val Val  
1 5

<210> 31  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 31  
Ala Gly Leu Gly Val Val Glu Arg  
1 5

<210> 32  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 32  
Ala Gly Leu Gly Ile Ser Ser Thr  
1 5

<210> 33  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 33  
Glu Pro Gln Ala Leu Ala Met Ser  
1 5

<210> 34  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 34  
Gln Ala Leu Ala Met Ser Ala Ile  
1 5

<210> 35  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 35  
Ala Ala Tyr His Leu Val Ser Gln  
1 5

<210> 36  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 36  
Met Asp Ala Phe Leu Glu Ser Ser  
1 5

<210> 37  
<211> 8  
<212> PRT  
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PEPTIDE

<400> 37  
Glu Ser Leu Pro Val Val Ala Val  
1 5

<210> 38  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 38  
Ser Ala Pro Ala Val Glu Ser Glu  
1 5

<210> 39  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 39  
Asp Val Ala Gln Phe Val Leu Thr  
1 5

<210> 40  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 40  
Val Ala Gln Phe Val Leu Thr Glu  
1 5

<210> 41  
<211> 8  
<212> PRT  
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<220>  
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PEPTIDE

<400> 41

Ala Gln Phe Val Leu Thr Glu Gly  
1 5

<210> 42  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
PEPTIDE

<400> 42  
Pro Val Gln Pro Ile Gly Pro Gln  
1 5

<210> 43  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
OLIGONUCLEOTIDE

<400> 43  
agaccatggg tcataactcat caggacttca a

31

<210> 44  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SYNTHETIC  
OLIGONUCLEOTIDE

<400> 44  
ctaccatggc tatttgaga aagaggtca

29